STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

AMENDED REPORT	
(highlight changes)	

NOV 1 7 2005

DIV. OF OIL, GAS & MINING

••,••••••		APPLICAT	ION FOR P	ERMIT TO	DRILL	1	5. MINERAL LEASE NO: ML-47969	6. SURFACE: State
1A. TYPE OF WO	DRK: D	RILL 🗸 F	REENTER	DEEPEN			7. IF INDIAN, ALLOTTEE OR	TRIBE NAME:
B. TYPE OF WE	ill: OIL	GAS 🗹 (OTHER	SIN	GLE ZONE MULTIPLE ZON	EV	8. UNIT of CA AGREEMENT	NAME:
2. NAME OF OPE							9. WELL NAME and NUMBE	
	<u> </u>	ion Company					North Horseshoe	
	3. ADDRESS OF OPERATOR: 1100 Louisiana Suite 20 CITY Houston STATE TX ZIP 77002 PHONE NUMBER: (713) 830-6800						10. FIELD AND POOL, OR W Undesignated U	
	WELL (FOOTAG					-+	11. QTR/QTR, SECTION, TO	
AT SURFACE:	704' FSL	& 649' FEL	•		40, 308504		MERIDIAN: SESE 9 6S	22E
AT PROPOSED	PRODUCING ZO	one: same as	above 44	62957	(-109, 439676		SESE 9 03	225
14. DISTANCE IN	MILES AND DIR	ECTION FROM NEAF	EST TOWN OR POST	OFFICE:			12, COUNTY;	13. STATE: UTAH
14.25 mil	les south of	f Vernal, UT					Uintah	UIAH
15. DISTANCE TO	O NEAREST PRO	PERTY OR LEASE LI	NE (FEET)	16. NUMBER O	FACRES IN LEASE:	17. NUI	MBER OF ACRES ASSIGNED	TO THIS WELL:
649'		-			2,240			40
	O NEAREST WEL R) ON THIS LEAS	L (DRILLING, COMPL E (FEET)	ETED, OR	19. PROPOSED	DEPTH:	20, BO	ND DESCRIPTION:	
1,300'					9,345	104	155044	
	,	ER DF, RT, GR, ETC.):		ATE DATE WORK WILL START:		IMATED DURATION:	
4,743 GR				11/15/20	005	30 1	Days	
24.			PROPOSE	D CASING A	ND CEMENTING PROGRAM			
SIZE OF HOLE	CASING SIZE	, GRADE, AND WEIG	HT PER FOOT S	ETTING DEPTH	CEMENT TYPE, QU/	ANTITY, Y	IELD, AND SLURRY WEIGH	Т
11"	8 5/8"	J-55	36#	2,000	PREMIUM LITE II	250	SKS 3.38 C	F 1
					CLASS "G"	329	SKS 1.2 C	F 15.6 PPG
					Calcium Chloride	200	SKS 1.10 C	F 15.6 PPG
7 7/8"	4 1/2"	N-80	11.6#	9,401	PREMIUM LITE II	200	SKS 3.3 C	F 11.0 PPG
					CLASS "G"	400	SKS 1.56 C	F 14.3 PPG
	·							
25.				ATTA	CHMENTS		00	
VERIFY THE FO	LLOWING ARE A	TTACHED IN ACCOR	DANCE WITH THE UT	AH OIL AND GAS C	ONSERVATION GENERAL RULES:		CONFIDEN	ITIAI
[7 7]					1 170		- OW IDEIV	IIIAL
WELL PI	LAT OR MAP PRE	PARED BY LICENSE	D SURVEYOR OR EN	GINEER	COMPLETE DRILLING PLAN			
✓ EVIDEN	CE OF DIVISION	OF WATER RIGHTS /	APPROVAL FOR USE	OF WATER	FORM 5, IF OPERATOR IS PE	ERSON OF	COMPANY OTHER THAN	THE LEASE OWNER
NAME (PLEASE	_{PRINT)} Willar	m A. <u>Ryan</u>			TITLE Agent	in and a long plan and a second and a		
SIGNATURE	Willen	a t	7		DATE 11.7.09	****		· · · · · · · · · · · · · · · · · · ·
(This space for St	ate use only)	a.l	V		Approved by the Utah Division of Dil, Gas and Mining		RECEI	VED

(11/2001)

43-047-37343

T6S, R22E, S.L.B.&M. THE HOUSTON EXPLORATION COMPANY Well location, NORTH HORSESHOE #16-9-6-22, located as shown in the SE 1/4 SE 1/4 of \$89'06'W - 5319.60' (G.L.O.) Section 9, T6S, R22E, S.L.B.&M. Uintah County, Utah. BASIS OF FIFVATION SPOT ELEVATION AT A HILLTOP LOCATED IN THE SW 1/4 OF SECTION 11, T6S, R22E, S.L.B.&M. TAKEN FROM THE RASMUSSEN HOLLOW QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 4993 FFFT. (G.L. (G.L.O.) 00 5280. 5280.00 LOT 2 LOT 1 SCALE GREEN RIVER NORTH HORSESHOE CERTIFICATE #16-9-6-22 THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER Elev. Ungraded Ground = 4743' SUPERVISION AND THAT THE SAME ARE THE AND CORRE BEST OF MY KNOWLEDGE AND BELL 90* LOT 3 (G.L.O.) LOT 4 1970 Brass Cap, REGISTRATION NO. 0.4' High, T-Post STATE OF UTAH 5280.00' (G.L.O.) 90. UINTAH ENGINEERING & LAND SURVEYING BASIS OF BEARINGS 85 SOUTH 200 EAST - VERNAL, UTAH 84078 LEGEND: BASIS OF BEARINGS IS A G.P.S. OBSERVATION. (435) 789-1017 (AUTONOMOUS NAD 83) = 90° SYMBOL SCALE DATE SURVEYED: DATE DRAWN: LATITUDE = 40'18'27.66" (40.307683) 1" = 1000'= PROPOSED WELL HEAD. 08-03-05 08-10-05 LONGITUDE = 109'26'25.74" (109.440483) W 1/4 Sec. 15 1967 Brass Cap, 0.3' High, Pile PARTY REFERENCES = SECTION CORNERS LOCATED. (AUTONOMOUS NAD 27) N.H. D.M. L.K. G.L.O. PLAT LATITUDE = 40'18'27.79" (40,307719) of Stones WEATHER LONGITUDE = 109'26'23.26" (109.439794) THE HOUSTON HOT EXPLORATION COMPANY

Ten Point Plan

The Houston Exploration Company

North Horseshoe 16-9-6-22

Surface Location SE 1/4 SE 1/4, Section 9, T. 6S., R. 22E.

1. Surface Formation

Green River

2. Estimated Formation Tops and Datum:

Formation	Depth	Datum
GR	Surface	4,743'
KB	+12'	4,755'
Green River	3,645'	+1,110'
Wasatch	6,745'	-1,990°
Mesaverda	9,345'	-4,590'TD

A 11" hole will be drilled to 2,000' +/-. The hole depth will depend on the depth that the Birds Nest Zone is encountered. The hole will be drilled 400' beyond the top of the Birds Nest.

3. Producing Formation Depth:

Formation objective includes the Green River, Wasatch, Mesaverde and its submembers.

Off set well information

Permitted/Drilled:

North Horseshoe #2-15-6-22 North Horseshoe #4-15-6-22 North Horseshoe #14-10-6-22

Abandoned Wells:

N #2

4. Proposed Casing:

Hole	Casing			Coupling	Casing	
<u>Size</u>	<u>Size</u>	Weight/FT	<u>Grade</u>	& Tread	<u>Depth</u>	New/Used
11	8 5/8	36#	J-55	STC	2000	NEW
7 7/8	4 1/2	11.6#	N-80	LTC	T.D.	NEW

Cement Program:

The Surface Casing will be cemented to the Surface as follows:

Lead:	Casing <u>Size</u>	Cement Type	Cement Amounts	Cement <u>Yield</u>	Cement Weight
	8 5/8	Premium Lite II .05#/sk Static Free .25#/sk Cello Flake 5#/sk KOL Seal .002 gps FP-6L 10% Bentonite .5% Sodium Metasil 3% Potassium Chlor		3.38ft³/sk	11.0 ppg
Tail:					
	8 5/8	Class "G" 2% Calcium Chlorid .25#/sk Cello Flake	329 sks. +/- le	1.2ft³/sk	15.6 ppg
Top Jo	ob:				
	8 5/8	4% Calcium Chlorid .25#/sk Cello Flake	e 200 sks. +	/-1.10ft³/sk	15.6 ppg

Production casing will be cemented to 2,500' or higher as follows:

	Casing <u>Size</u>	Cement Type	Cement Amounts	Cement <u>Yield</u>	Cement Weight
Lead:					
	4 1/2	Premium Lite II .25#/sk Cello Flake .05#/sk Static Free 5#/sk Kol Seal 3% Potassium Chlore .055 gps FP-6L 10% Bentonite .5 Sodium Metasilica		3.3ft³/sk	11.0 ppg
Tail:					
	4 1/2	Class "G" .05% Static Free 2 Sodium Chloride .1% R-3 2% Bentonite	400 sks +/-	1.56ft ³ /sk	14.3 ppg

5. BOP and Pressure Containment Data:

The anticipated bottom hole pressure will be less than 3000 psi.

A 3000-psi WP BOP system as described in the BOP and Pressure Containment Data (attached) will be installed and maintained from the 8 5/8" surface casing. The BOP system including the casing will be pressure tested to minimum standards set forth in "On Shore Order #2". The BOP will be mechanically checked daily during the drilling operation.

6. Mud Program:

Interval	Mud weight lbs./gal.	Viscosity Sec./OT.	Fluid Loss M1/30 Mins.	Mud Type
0-2000 2000-T.D.	Air/Clear Water 8.4-12.0	30	No Control 8-10	Water/Gel Water/Gel

7. Auxiliary Equipment

Upper Kelly cock, full opening stabbing valve, 2 ½" choke manifold and pit level indicator.

8. Testing, Coring, Sampling and Logging:

a)	Test:	None are anticipated.	
b)	Coring:	There is the possibility of sic	lewall coring.
c)	Sampling:	Every 10' from 2000' to T.D.).
d)	Logging:	Type DLL/SFL W/GR and SP FDC/CNL W/GR and CAL	Interval T.D. to Surf. Csg T.D. to Surf. Csg

9. Abnormalities (including sour gas):

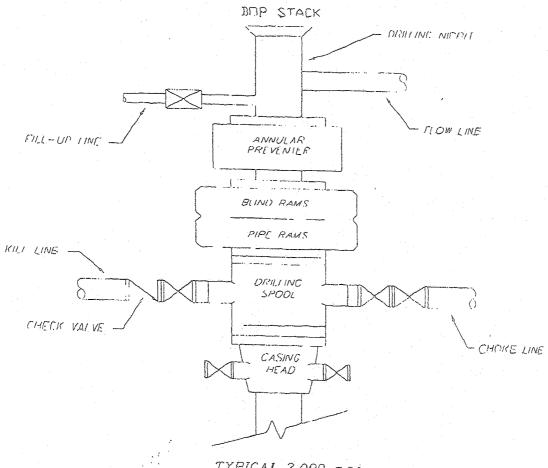
No abnormal pressures, temperatures or other hazards are anticipated. Oil and gas shows are anticipated in the Wasatch Formation. Other wells drilled in the area have not encountered over pressured zones or H2S.

10. Drilling Schedule:

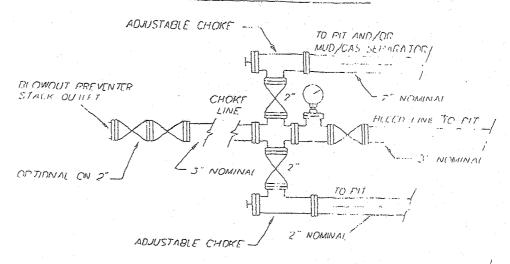
The anticipated starting date is $\underline{1/1}$ /2005. Duration of operations is expected to be 30 days.

THE HOUSTON EXPLORATION COMPANY

TYPICAL 3.000 p.s.z. BLOWOUT PREVENTER SCHEMATIC



TYPICAL 3.000 p.s.i. CHOKE MANIFOLD SCHEMATIC



MUTEU ENVIN 201 TYPICAL CACYATL Merca Grando para. WELL HEAD TO THE STRUCTURE OF THE tHMIValve a chack DAT AT SE TO OAS SALES Alabam is cinear

THE HOUSTON EXPLORATION COMPANY 13 POINT SURFACE USE PLAN FOR WELL

NORTH HORSESHOE 16-9-6-22

LOCATED IN SE 1/4 SE 1/4

SECTION 9, T. 6S, R22E, S.L.B.&M.

UINTAH COUNTY, UTAH

LEASE NUMBER: ML-47969

SURFACE OWNERSHIP: STATE

1. Existing Roads:

To reach The Houston Exploration Co. well North Horseshoe 16-9-6-22 in Section 9, T6S, R 22E, Starting in Vernal, Utah.

Proceed in an easterly, then southerly direction from Vernal, Utah along U.S. Highway 40 approximately 3.9 miles to the junction of this road and State Highway 45; exit right and proceed in a southerly, then southeasterly direction approximately 5.2 miles on State Highway 45 to the junction of this road and an existing road to the southeast, turn left and proceed in a southeasterly, then southerly direction approximately 4.5 miles to the beginning of the proposed access for the 14-10-6-22 to the west; follow road flags in a westerly direction approximately 0.15 miles to the proposed 14-10-6-22 and the beginning of the proposed access for the 16-9-6-22 to the west; follow road flags in a westerly direction approximately 0.5 miles to the proposed location.

Total distance from Vernal, Utah to the proposed well location is approximately 14.25 miles.

All existing roads to the proposed location are State of Utah, BLM maintained or County Class D roads. Please see the attached map for additional details.

2. Planned access road

The proposed access road will be approximately 2,640' +/- of new

construction on lease. The road will be graded once per year minimum and maintained.

- A) Approximate length 2640 ft B) Right of Way width 30 ft
- C) Running surface 18 ft
- D) Surface material Native soil
- E) Maximum grade 5%
 E) Fence crossing None
- F) Fence crossing None
- G) Culvert None H) Turnouts None
- H) Turnouts None

 I) Major cuts and fills None
- J) Road Flagged Yes
- K) Access road surface ownership
 State
- L) All new construction on lease

Yes

M) Pipe line crossing None Please see the attached location plat for additional details.

An off lease right-of-way will not be required.

All surface disturbances for the road and location will be within the lease boundary.

3. Location of existing wells

The following wells are located within
a one-mile radius of the location site.

- A) Producing well None
- B) Water well None
- C) Abandoned well N #2
- D) Temp. abandoned well None
 E) Disposal well None
- F) Drilling /Permitted well North Horseshoe 2-15-6-22

North Horseshoe 4-15-6-22

North Horseshoe 14-10-6-22

- G) Shut in wells
 None
 None
- I) Monitoring or observation well

None

Please see the attached map for additional details.

4. Location of tank batteries, production facilities and production gathering service lines.

All production facilities are to be contained within the proposed location site. Please see the attached plat plan for a typical gas well separator installation and well site piping.

All permanent (on site for more than six months or longer) structures constructed or installed will be painted an **Carlsbad Canyon** color. Facilities required to comply with O.S.H.A. (Occupational Safety and Health Act) will be excluded. The required paint color is **Carlsbad Canyon**.

All tanks will be surrounded by a dike of sufficient capacity to contain the storage capacity of the largest tank in the battery. The integrity of the dike will be maintained.

The operator will adhere to all site security guidelines and regulation identified in 43 cfr 3126.7.

All off lease storage, off lease measurement, commingling on lease or off lease, of production, will have prior written approval form the authorized officer.

If the well is capable of economic production a surface gas line will be required.

Approximately 2,514' +/- of 3" steel surface gas gathering line would be constructed on State Lands. The line will tie into the proposed pipeline in Section 10, T6S, R22E. The pipeline would be strung and boomed to the northeast of the location. The pipeline may be buried as determined by the Authorized Officer at the onsite.

An off lease right-of-way will not be required.

Please see the attached location diagrams for pipeline location.

The gas meter run will be located within 500' of the wellhead. The gas line will be buried or anchored down from the wellhead to the meter.

Meter runs will be housed and/or fenced.

The gas meter will be calibrated and the tank strapped in place prior to any deliveries. Tests for meter accuracy will be conducted monthly for the first three months on new meter installations and at least quarterly thereafter. The authorized officer will be provided with a date and time for the initial meter calibration and all future meterproving schedules. A copy of the meter calibration report will be submitted to the BLM's Vernal District office and State of Utah, Division of Oil, Gas, and Mining. All measurement facilities will conform to API (American Petroleum Institute) and AGA (American Gas Association) standards for gas and liquid hydrocarbon measurement.

5. Location and type of water supply

Water for drilling and cementing will come from The Green River in Permit # T-76073.

6. Source of construction materials

All construction material for this location site and access road shall be borrow material accumulated during construction of the location site and access road. Additional road gravel or pit lining material will be obtained from private resources.

7. Methods for handling waste disposal

A) Pit construction and liners:

The reserve pit will be approximately 12 ft. deep and most of the depth shall be below the surface of the existing ground Please see the attached plat for details.

The reserve pit will be lined.

The reserve pit will be used to store water for drilling. A semi-closed system will be used to drill the well. All fresh water for drilling will come from a frac tank placed on location and from the rig tank. The pit will be used to hold non-flammable materials such as cuttings, salt, drilling fluids, chemicals, produced fluids, etc.

B) Produced fluids:

Produced water will be confined to the reserve pit, or if deemed necessary, a storage tank for a period not to exceed 90 days after initial production. During the 90-day period an application for approval for permanent disposal method and location will be submitted to the authorized officer. Evaporation may be used instead of trucking to facilitate closing and reclamation of the reserve pit. A pumping system would be used for evaporation.

C) Garbage:

A trash cage fabricated from expanded metal will be used to hold trash on location and will be removed to an authorized landfill location.

D) Sewage:

A portable chemical toilet will be supplied for human waste.

E) Site clean-up:

After the rig is moved off the location the well site area will be cleaned and all refuse removed.

8. Ancillary facilities

There are no ancillary facilities planned at this time and none are foreseen for the future.

9. Well-site layout

Location dimensions are as follows:

A) Pad length	345 ft.
B) Pad width	245 ft.
C) Pit depth	12 ft.
D) Pit length	150 ft.
E) Pit width	75 ft.
F) Max cut	18.3 ft.
G) Max fill	7.2 ft.
H) Total cut yds.	8,130 cu yds

J) Top soil location

I) Pit location

West end

East side

K) Access road location

North end corner C

L) Flare Pit

Please see the attached location diagram for additional details.

All pits will be fenced according to the following minimum standards:

- A) Thirty nine inch net wire shall be used with at least one strand of wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.
- B) The net wire shall be no more than 2 inches above the ground. The barbed wire shall be 3 inches above the net wire. Total height of the fence shall be at leas 42 inches.
- C) Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.

- D) Standard steel, wood or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than 16 ft.
- E) All wire shall be stretched by using a stretching device before it is attached to the corner posts.
- 10. Plans for restoration of the surface

Prior to construction of the location, the top 6 inches of soil material will be stripped off the location and the pit area. The topsoil removed and piled will amount to approximately 1,660 cubic yards of material. Topsoil will be stockpiled in one distinct pile. Placement of the topsoil is noted on the attached location plat. The topsoil pile from the location will be seeded as soon as the soil is stock piled with the seed mix listed. When all drilling and completion activities have been completed and the pit back-filled the topsoil from the pit area will be spread on the pit area. The pit area will be seeded when the soil has been spread. The unused portion of the location (the area outside the dead men) will be re-contoured.

The dirt contractor will be provided with an approved copy of the surface use plan prior to construction activities.

Changes to the drainage during the construction activities shall be restored to its original line of flow or as near as possible when the pit is back-filled

All disturbed areas will be recontoured to the approximate natural contours. Prior to back filling the pit the fences around the reserve pit will be removed.

The reserve pit will be reclaimed within 90 days of well completion. If the reserve pit has not dried sufficiently to allow back filling, an extension on the time requirement for back filling the pit will be requested. Once reclamation activities have begun, they shall be completed within 30 days.

After the reserve pit has been reclaimed, no depressions in the soil covering the reserve pit will be allowed. The objective is to keep seasonal rainfall and run off from seeping into the soil used to cover the reserve pit. Diversion ditches and water bars will be used to divert the run off as needed.

When restoration activities have been completed, the location site and new access road cuts and shoulders shall be reseeded. Prior to reseeding, all disturbed areas will be scarified and left with a rough surface.

A) Seeding dates:

Seed will be spread when topsoil is stock piled and when reclamation work is performed.

The seed mix and quantity list will be used whether the seed is broadcast or drilled.

B) Seed Mix

To be determined by the Authorized Officer.

11. Surface ownership:

Access road	State
Location	State
Pipe line	State

12. Other information:

A) Vegetation

The vegetation coverage is Slight. The majority of the existing vegetation consists of non-native species. Rabbit brush, bitter brush, and Indian Rice grass and Sagebrush are also found on the location.

B) Dwellings:

There are no dwelling or other facilities within a one-mile radius of the location.

C) Archeology:

The location has been surveyed. A copy of that survey will be forwarded to your office.

If, during operations, any archaeological or historical sites, or any objects of antiquity (subject to the antiquities act of June 8, 1906) are discovered, all operations, which would affect such sites, will be suspended and the discovery reported

promptly to the surface management agency.

D) Water:

The nearest water is the Green River located 600' to the South.

E) Chemicals:

No pesticides, herbicides or other possible hazardous chemicals will be used without prior application.

F) Notification:

- a) Location Construction At least forty eight (48) hours prior to construction of location and access roads.
- b) Location completion Prior to moving on the drilling rig.
- c) Spud notice At least twenty-four (24) hours prior to spudding the well.
- d) Casing string and cementing
 At least twenty-four (24) hours prior to running casing and cementing all casing strings.
- e) BOP and related equipment tests At least twenty-four (24) hours prior to initial pressure tests.
- f) First production notice Within five (5) business days after the new well begins, or production resumes after well has

been off production for more than 90 days.

G) Flare pit:

The flare pit will be located in **corner C** of the reserve pit out side the pit fences and 100 feet from the bore hole on the east side of the location. All fluids will be removed from the pit within 48 hours of occurrence.

13. Lessees or Operator's representative and certification

A) Representative

William A. Ryan Rocky Mountain Consulting 290 S 800 E Vernal, UT 84078

Office 435-789-0968 Fax 435-789-0970 Cellular 435-828-0968

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, onshore oil and gas orders, and any applicable notices to lessees. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

This drilling permit will be valid for a period of one year from the date of approval.

After permit termination, a new

application will be filed for approval for any future operations.

B) Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill-site and access route that I am familiar with the conditions which presently exist, that the statements made in this plan are, to the best of my knowledge and belief, true and correct, and that the work associated with the operation proposed herein will be preformed by The Houston **Exploration Company and its** contractors and subcontractors in conformity with this plan and terms and conditions with this plan and the terms and conditions under which it is approved.

William A. Ryan, Agent

Rocky Mountain Consulting

Onsite Dates:

Statement of use of Hazardous Materials

No chemical(s) from the EPA's consolidated list of Chemicals subject to Reporting under Title III of the Superfund Amendments and Reauthorization, Act (SARA) of 1986 will be used, produced, transported, stored, disposed, or associated with the proposed action. No transported, disposed, or associated with the proposed, stored, transported, disposed, or associated with the proposed action.

If you require additional information please contact:

William A Ryan Agent for The Houston Exploration Company Rocky Mountain Consulting 290 S 800 E Vernal, UT 84078

435-789-0968 Office 435-828-0968 Cell 435-789-0970 Fax

THE HOUSTON EXPLORATION COMPANY

NORTH HORSESHOE #16-9-6-22

LOCATED IN UINTAH COUNTY, UTAH **SECTION 9, T6S, R22E, S.L.B.&M.**

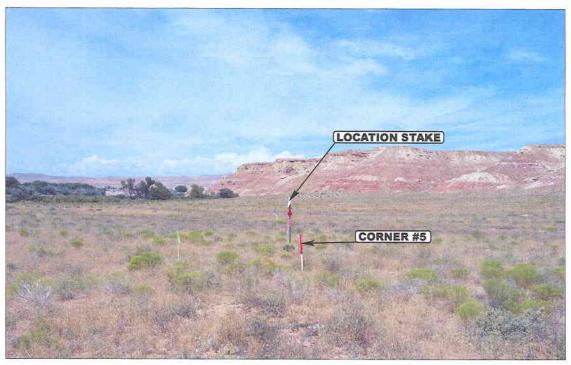


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHWESTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: WESTERLY

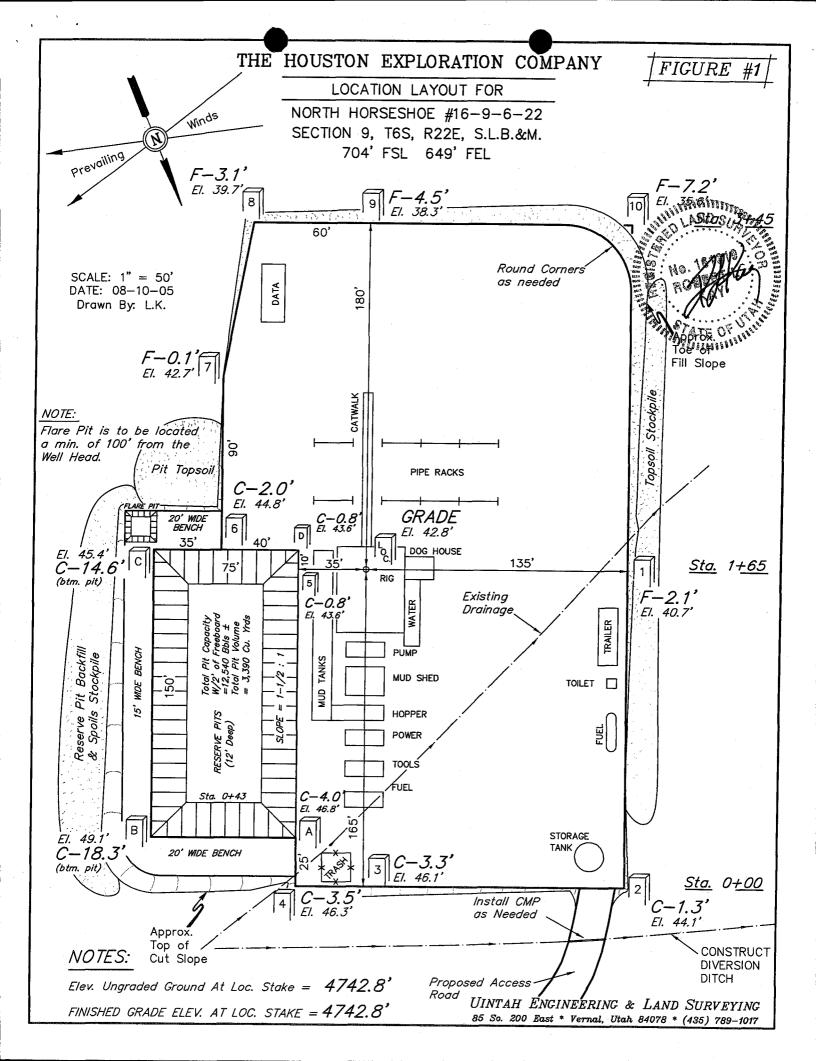


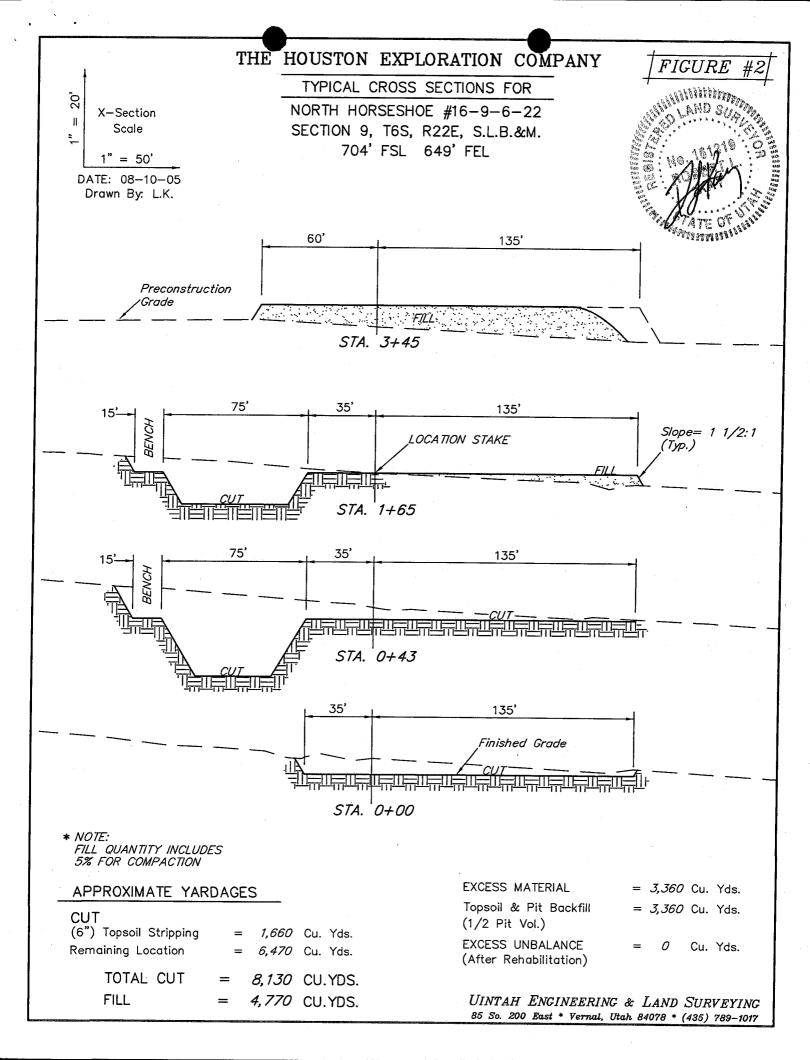
Uintah Engineering & Land Surveying 85 South 200 East Vernal, Utah 84078 435-789-1017 uels@uelsinc.com

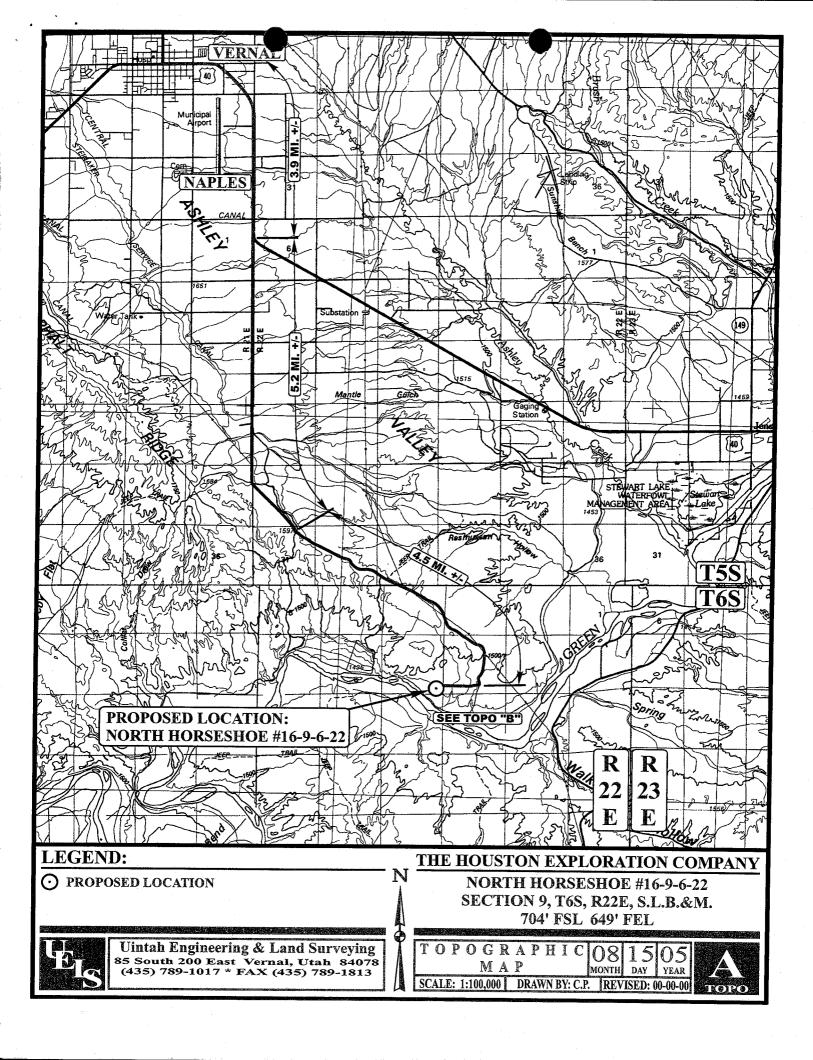
LOCATION PHOTOS

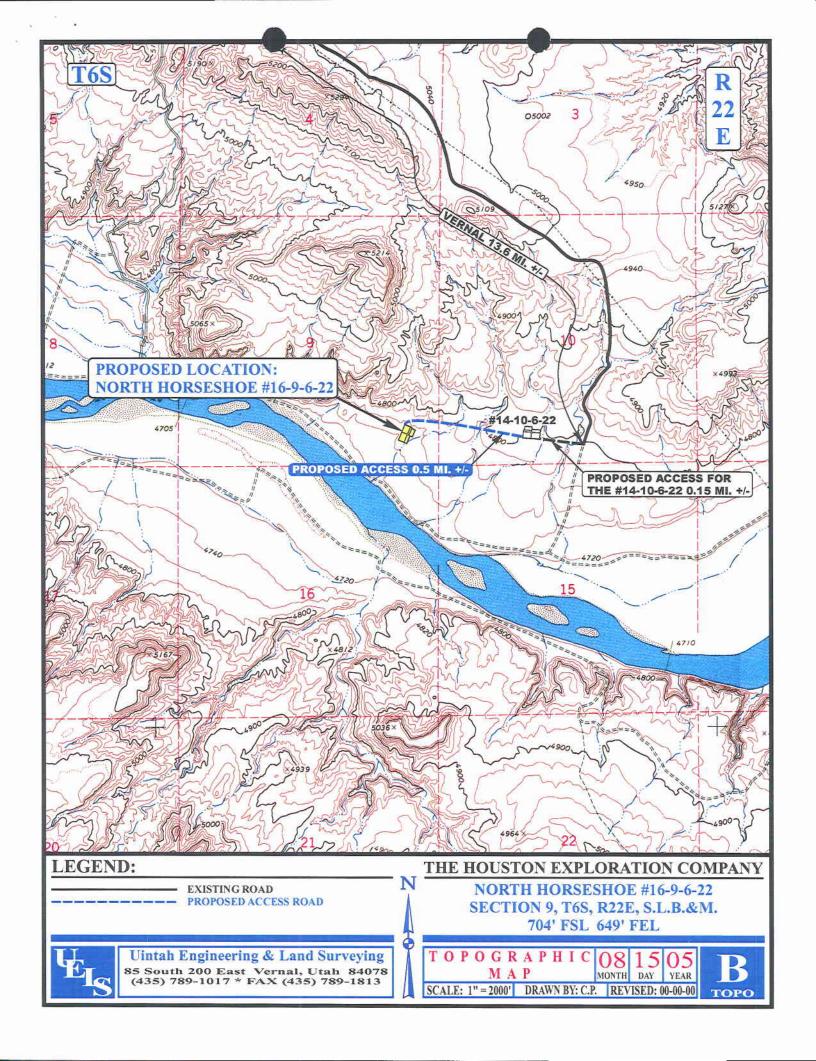
MONTH TAKEN BY: N.H. DRAWN BY: C.P. REVISED: 00-00-00

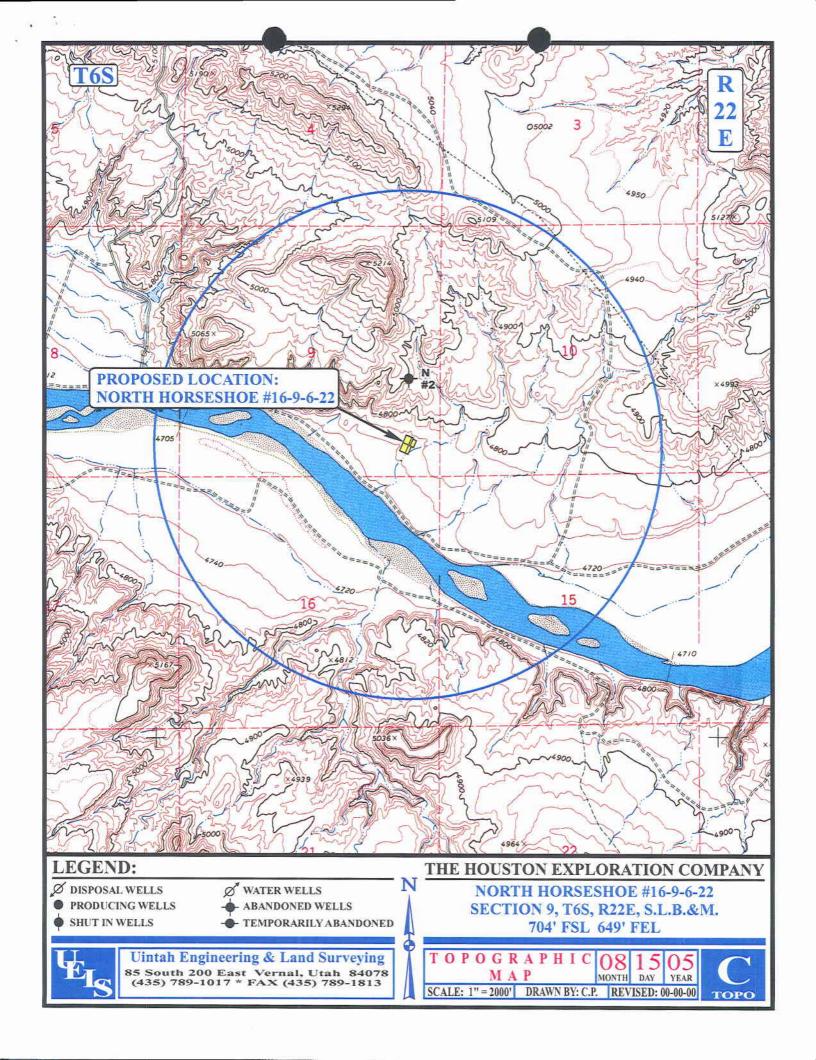
РНОТО

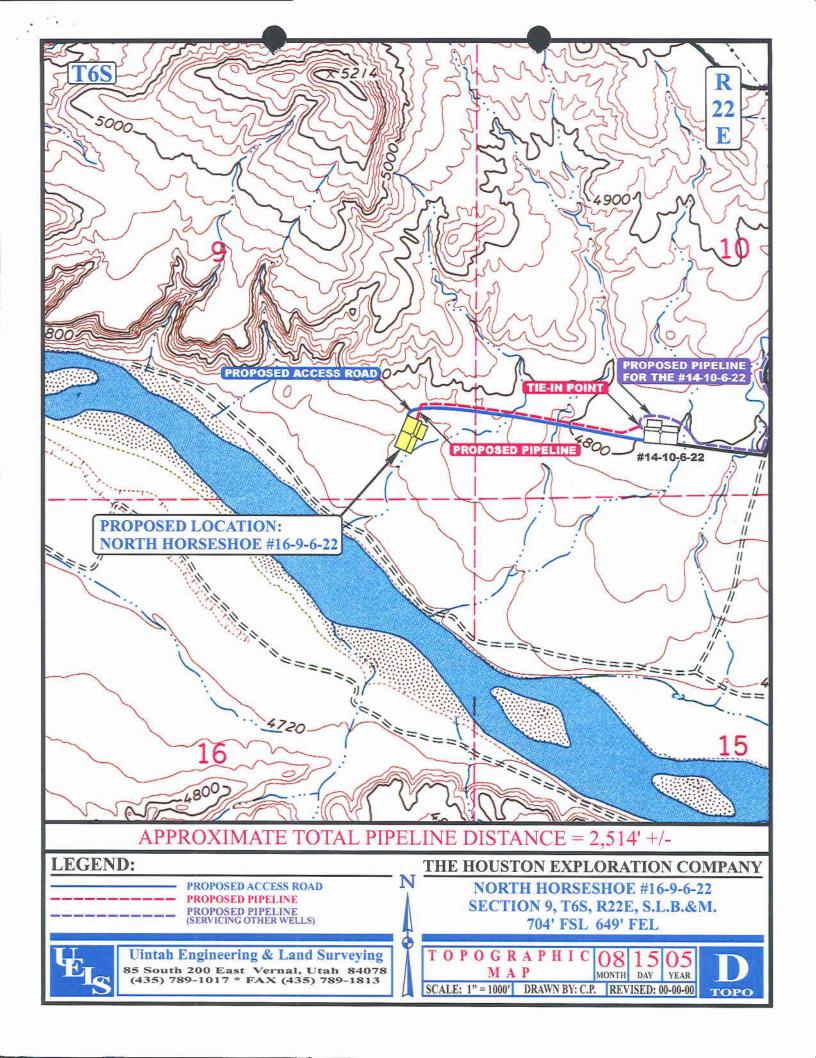














DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

STATE OF UTAH

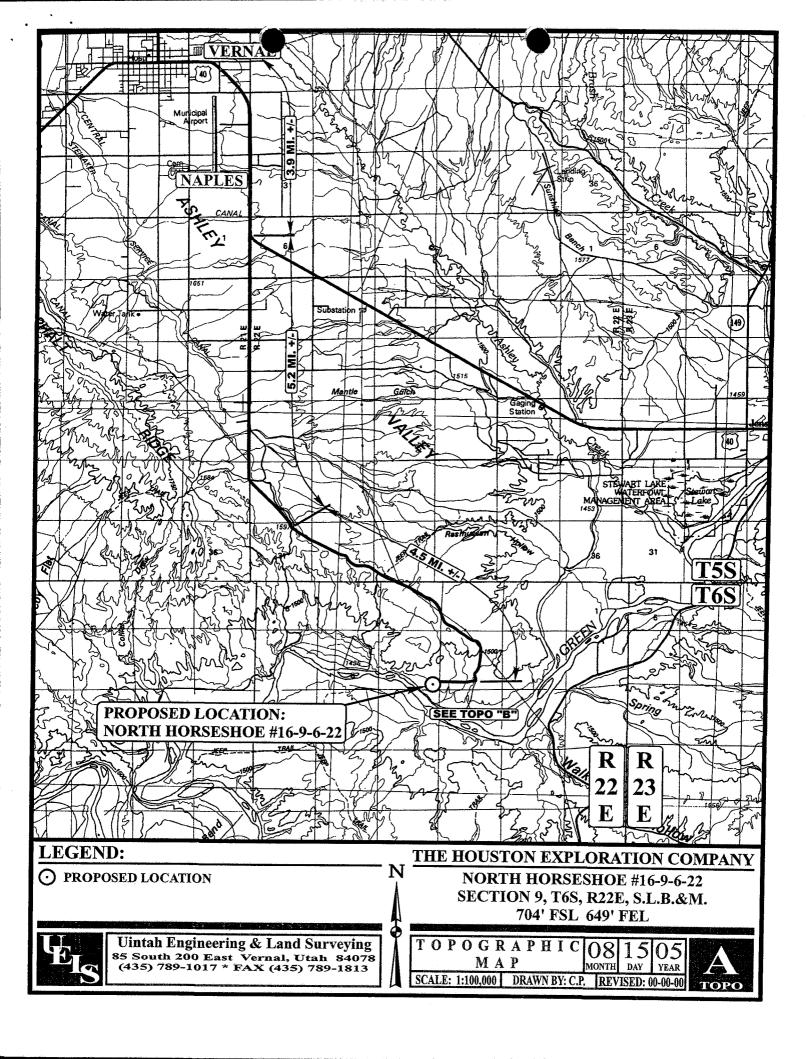
AMENDED REPORT	
(highlight changes)	

	A						. MINERAL LEASE NO: /IL-47969	6. SURFACE: State
1A. TYPE OF WO	PRK: DF	RILL 🗸	REENTER [DEEPEN		7	, IF INDIAN, ALLOTTEE O	R TRIBE NAME:
B. TYPE OF WE	LL: OIL	gas 🗾	OTHER	SING	GLE ZONE MULTIPLE ZON	E 🗾 8	. UNIT or CA AGREEMEN	T NAME:
2. NAME OF OPE	RATOR:					9	, WELL NAME and NUMB	≅R·
	on Exploration	n Compa	ńγ			1	North Horsesho	
3. ADDRESS OF		·			PHONE NUMBER:		0. FIELD AND POOL, OR	and the second s
	iana Suite 20	401.1	ston s77	ATE TX ZIP 770	002 (713) 830-6800		Undesignated	WildCat
4. LOCATION OF	WELL (FOOTAGES	5)			40, 308504	1	1. QTR/QTR, SECTION, T MERIDIAN:	
AT SURFACE:	704' FSL &	649' FEL				، ا		2 000
AT PROPOSED	PRODUCING ZON	e: same a	as above 4	462957	1 -109, 439676		SESE 9 68	S 22E
14. DISTANCE IN	MILES AND DIREC	TION FROM NE	AREST TOWN OR PO	OST OFFICE:		1	2. COUNTY:	13. STATE:
14.25 mil	es south of \	√ernal, U	Γ				Uintah	UTAH
15. DISTANCE TO	NEAREST PROPE	RTY OR LEASI	LINE (FEET)	16. NUMBER O	FACRES IN LEASE;	17. NUM	BER OF ACRES ASSIGNE	D TO THIS WELL:
649'					2,240			40
18. DISTANCE TO	O NEAREST WELL	(DRILLING, CO	MPLETED, OR	19. PROPOSED		20. BON	D DESCRIPTION:	
1,300'	R) ON THIS LEASE	(FEET)			9,345	į.	155044	
	(SHOW WHETHER	DF. RT. GR. E	TC.):	22 APPROXIM	ATE DATE WORK WILL START:		MATED DURATION:	
4,743 GR	•	,,,	,.	11/15/20		i		
7,770 011	·		····	11/13/20		30 E		
24.			PROPOS	SED CASING AI	ND CEMENTING PROGRAM		•	
SIZE OF HOLE	CASING SIZE, G	RADE, AND W	EIGHT PER FOOT	SETTING DEPTH	CEMENT TYPE, QU/	ANTITY, YII	ELD, AND SLURRY WEIGH	-tT
11"	8 5/8"	J-55	36#	2,000	PREMIUM LITE II	250 5	SKS 3.38 C	F 1
·				<u> </u>	CLASS "G"	329 5	SKS 1.2 C	F 15.6 PPG
		·			Calcium Chloride	200 S	SKS 1.10 C	F 15.6 PPG
7 7/8"	4 1/2"	N-80	11.6#	9,401	PREMIUM LITE II	200 S	SKS 3.3 C	F 11.0 PPG
					CLASS "G"	400 5	SKS 1.56 C	F 14.3 PPG
						<u> </u>		
25.				ATTA	CHMENTS			i in ang ang ang ang ang ang ang ang ang an
VERIFY THE FOL	LOWING ARE ATT	ACHED IN ACC	ORDANCE WITH THE	UTAH OIL AND GAS C	ONSERVATION GENERAL RULES:		CONFIDEN	ITIAL
					1	`	SOM INCL	VIIAL
✓ WELL PL	AT OR MAP PREPA	RED BY LICEN	SED SURVEYOR OR	ENGINEER	COMPLETE DRILLING PLAN			· · · · · · · · · · · · · · · · · · ·
✓ EVIDENO	CE OF DIVISION OF	WATER RIGHT	'S APPROVAL FOR US	SE OF WATER	FORM 5, IF OPERATOR IS PE	RSON OR	COMPANY OTHER THAN	THE LEASE OWNER
	Willam	A Pyan		······································	Agent	······································		
NAME (PLEASE	PRINT) VVIIIAM	<u>۸. ایکوی</u>	$\overline{}$	are an artifician of the second	TITLE Agent	·····		
SIGNATURE	William	<u>-a</u>	ta-		DATE 11-7-05			
(This space for Sta	ite use only)	-	U					
							RECE	VED
	L	12-11-	1-37393				1	
API NUMBER AS	SIGNED:	704	1 1743		APPROVAL:		NOV 17	ZUUD

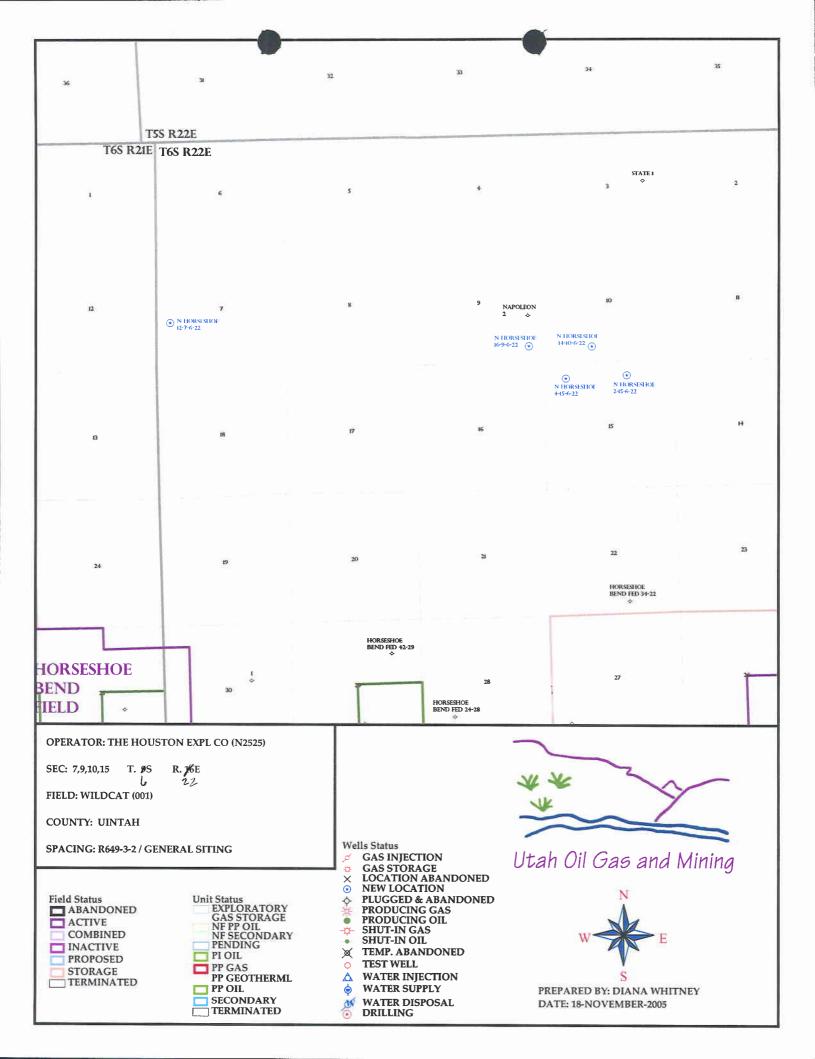
DIV. OF OIL, GAS & MINING

NOV 1 7 2005

T6S, R22E, S.L.B.&M. THE HOUSTON EXPLORATION COMPANY Well location, NORTH HORSESHOE #16-9-6-22, located as shown in the SE 1/4 SE 1/4 of S89'06'W - 5319.60' (G.L.O.) Section 9, T6S, R22E, S.L.B.&M. Uintah County, Utah. BASIS OF ELEVATION SPOT ELEVATION AT A HILLTOP LOCATED IN THE SW 1/4 OF SECTION 11, T6S, R22E, S.L.B.&M. TAKEN FROM THE RASMUSSEN HOLLOW QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 4993 FEET. (G.L.O.) (G.L.O.) 5280.00 5280.00 NORTH LOT 2 LOT 1 SCALE GREEN RIVER NORTH HORSESHOE CERTIFICATE #16-9-6-22 THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER ME SUPERVISION AND THAT THE SAME ARE THE AND CORRECT. Elev. Ungraded Ground = 4743' BEST OF MY KNOWLEDGE AND BELLE 90* LOT 3 (G.L.O.) REGISTERED LAND SURVEYOR LOT 4 1970 Brass Cap, REGISTRATION NO. 161 0.4' High, T-Post STATE OF UTAH 5280.00' (G.L.O.) 90° UINTAH ENGINEERING & LAND SURVEYING BASIS OF BEARINGS 85 SOUTH 200 EAST - VERNAL, UTAH 84078 LEGEND: BASIS OF BEARINGS IS A G.P.S. OBSERVATION. (435) 789-1017 (AUTONOMOUS NAD 83) = 90° SYMBOL SCALE DATE SURVEYED: LATITUDE = 40'18'27.66" (40.307683) DATE DRAWN: 1" = 1000' = PROPOSED WELL HEAD. 08-03-05 08-10-05 LONGITUDE = 109'26'25.74" (109.440483) W 1/4 Sec. 15 1967 Brass Cap, PARTY REFERENCES (AUTONOMOUS NAD 27) = SECTION CORNERS LOCATED. 0.3' High, Pile N.H. D.M. L.K. G.L.O. PLAT LATITUDE = 40'18'27.79'' (40.307719) of Stones WEATHER LONGITUDE = 109'26'23.26" (109.439794) THE HOUSTON HOT **EXPLORATION COMPANY**



APD RECEIVED: 11/17/2005	API NO. ASSIGNED: 43-047-37393			
WELL NAME: N HORSESHOE 16-9-6-22 OPERATOR: HOUSTON EXPLORATION CO, (N2525) CONTACT: BILL RYAN	PHONE NUMBER: 435-789-0968			
PROPOSED LOCATION:				
SESE 09 060S 220E	INSPECT LOCATN BY: / /			
SURFACE: 0704 FSL 0649 FEL BOTTOM: 0704 FSL 0649 FEL UINTAH WILDCAT (1) LEASE TYPE: 3 - State LEASE NUMBER: ML-47969	Tech Review	Initials	Date	
	Engineering	DRD	1/20/00	
	Geology			
	Surface			
SURFACE OWNER: 3 - State PROPOSED FORMATION: MVRD COALBED METHANE WELL? NO	LATITUDE: 40.30850 LONGITUDE: -109.4397			
RECEIVED AND/OR REVIEWED: Plat Bond: Fed[] Ind[] Sta[] Fee[] (No. 10 4155044) Potash (Y/N) N Oil Shale 190-5 (B) or 190-3 or 190-13 Water Permit (No. T-76073) RDCC Review (Y/N) (Date: 12/03/2005) Fee Surf Agreement (Y/N) Intent to Commingle (Y/N)	LOCATION AND SITING: R649-2-3. Unit R649-3-2. General			
COMMENTS: New Presit (11-29-05)				
STIPULATIONS: 1-BPUCING (SA)? Z-STATEMENT OF BASIS				



DIVISION OF OIL, GAS AND MINING APPLICATION FOR PERMIT TO DRILL STATEMENT OF BASIS

OPERATOR: THE	E HOUSTON EXPLORATION COMPANY			
WELL NAME & NUMBER: NOF				
)47-37393			
LOCATION: 1/4,1/4 SE/SE sec:9 TWP:	6S RNG: 22E, 704 FSL 649 FEL			
Geology/Ground Water:				
The Houston Ex. Co. proposes to set 2000 feet of surface casing cemented to the surface. The base of the moderately saline water is estimated at 3,700 feet. A search of Division of Water Rights records shows two water wells within a 10,000 foot radius of the proposed location. These wells are approximately. 25 miles and 1 mile west of the proposed well. The nearest well produces water from an unknown depth and is listed as industrial use. The farther well is 120 feet deep and is used for domestic and stock watering. The surface formation at this location is the Uinta Formation. The Uinta Formation is made up of discontinuous sands interbedded with shales and are not expected to produce prolific aquifers. The proposed surface casing should adequately protect any near surface aquifers. Reviewer: Brad Hill Date: 12-06-05				
Surface:				
The predrill investigation of the surface was performed on 11/29/05. Ben Williams with UDWR and Jim Davis with SITLA were invited to this investigation by email on 11/22/05. Both were present.				
Mr. Williams representing the UDWR stated the area is classified as high value yearlong habitat for antelope and critical value yearlong habitat for deer(relative to its vicinity to the Green River). He did not recommend any restriction periods or actions to the Operator or SITLA for these species. He stated no other wildlife species are expected to be significantly affected. Mr. Williams also gave Ms. Stringham and Mr. Davis a UDWR recommended seed mix to be used when reserve pit and location are reclaimed.				
The location is in a drainage about 500 feet upslope from the Green River floodplain. Proper installation and maintenance of a liner in the reserve pit is essential during drilling operations.				
This site is on State surface, with State minerals, and appears to be the best site for a location in the immediate area.				
Reviewer: Floyd Bartlett	Date: 11/30/05			

Conditions of Approval/Application for Permit to Drill:

1. A synthetic liner with a minimum thickness of 16 mils and a felt subliner shall be properly installed and maintained in the reserve pit.

OPERATOR: THE HOUSTON EXPLORATION COMPANY

WELL NAME & NUMBER: NORTH HORSESHOE 16-9-6-22

API NUMBER: 43-047-37393

LEASE: ML-47969 FIELD/UNIT: WILDCAT

LOCATION: 1/4,1/4 SE/SE sec: 9 TWP: 6S RNG: 22E, 704 FSL 649 FEL

LEGAL WELL SITING: 460 F SEC. LINE; 460 F 1/4,1/4 LINE; 920 F ANOTHER WELL.

GPS COORD (UTM): 632594 E 4462957 N SURFACE OWNER: STATE OF UTAH

PARTICIPANTS

Floyd Bartlett (DOGM), Ginger Stringham (HOUSTON), Ben Williams (UDWR)
Corey Stubbs (Stubbs & Stubbs Construction), Jim Davis, (SITLA).

REGIONAL/LOCAL SETTING & TOPOGRAPHY

The general setting and topography of the proposed wells within this area is on a relatively flat but slightly south sloping large bench north of the Green River. Asphalt ridge is to the north. The bench was formed by ancient river actions and deposited sediments. The area is approximately 14 miles south of Vernal, Utah and accessed by State Highway 45 and a medium standard Uintah County graveled road. The Green River floodplain lies on a lower bench to the south.

The proposed North Horseshoe 16-9-6-22 well is on a sandy gentle sloping bench approximately 600 feet north of the Green River. To reach the location 2,514 feet of new road will be constructed to the west from the proposed 14-10-6-22 location. The only perennial water in the area is in the Green River. A shallow swale intersects the northwest end of the location. A diversion ditch is planned to intercept this drainage and take it to the north and west around the location.

SURFACE USE PLAN

CURRENT SURFACE USE: wildlife, winter cattle grazing and hunting.

PROPOSED SURFACE DISTURBANCE: Construction of 2,514 miles of road, and a well location 345'x 210' plus reserve pit and soil stockpile storage outside the described area.

LOCATION OF EXISTING WELLS WITHIN A 1 MILE RADIUS: <u>None shown on attached 'TOPO C" map from GIS database</u>. Three other wells are planned in the immediate area and 1 abandoned well exists.

LOCATION OF PRODUCTION FACILITIES AND PIPELINES: All production facilities will be on location and added after drilling well. Pipeline will follow the edge of the access road approximately 2,514 feet to a tie-in point at the 14-10-6-22 well.

SOURCE OF CONSTRUCTION MATERIAL: <u>All construction material will be borrowed from site during construction of location.</u>

ANCILLARY FACILITIES: None will be required.

WILL DRILLING AT THIS LOCATION GENERATE PUBLIC INTEREST OR CONCERNS? EXPLAIN: Unlikely. Oilfield activity is common in the area. The location is not within the Green River floodplain.

WASTE MANAGEMENT PLAN:

Drilled cuttings will be settled into reserve pit. Liquids from pit will be allowed to evaporate. Formation water will be confined to storage tanks. Commercial contractor will handle sewage facilities, storage and disposal. Trash will be contained in trash baskets and hauled to an approved land fill.

ENVIRONMENTAL PARAMETERS

AFFECTED FLOODPLAINS AND/OR WETLANDS: None. The Green River floodplain is approximately 500 feet to the south.

FLORA/FAUNA: <u>Vegetation is dominated by rabbit brush</u>. <u>Cheat grass</u>, <u>Russian thistle</u>, <u>globe mallow</u>, <u>Indian ricegrass</u>, <u>stipa and annual mustard also exist</u>.

<u>Dominant fauna is pronghorn, rodents, songbirds, raptors, deer, bobcat, coyote.</u>

SOIL TYPE AND CHARACTERISTICS: Deep loamy sand, probably underlain with river deposited gravels.

EROSION/SEDIMENTATION/STABILITY: No stability problems are anticipated with the construction and operation of the location. A small drainage that intercepts the northwest corner of the location is planned to be diverted to the north and west around the location.

PALEONTOLOGICAL POTENTIAL: none observed.

RESERVE PIT

CHARACTERISTICS: 150' by 75' and 12' deep. The reserve pit is planned in an area of cut on the northeast side of the location. No stabilization problems are expected.

LINER REQUIREMENTS (Site Ranking Form attached): A liner will be required for reserve pit. Sensitivity score of 27, rating as Level I, Highly Sensitive. Operator routinely installs a 16 mil. liner in all reserve pits.

SURFACE RESTORATION/RECLAMATION PLAN

AS PER SITLA.

SURFACE AGREEMENT: AS PER SITLA.

CULTURAL RESOURCES/ARCHAEOLOGY: Site was inspected by Sagebrush Archeological Consultants on 11/4/2005. A report of this investigation will

be placed in the file.

OTHER OBSERVATIONS/COMMENTS

Ben Williams representing the UDWR stated the area is classified as high value yearlong habitat for antelope and critical value yearlong habitat for deer relative to its vicinity to the Green River. He did not recommend any restrictions to the Operator or SITLA.

ATTACHMENTS

Photos of site have been taken and placed on file.

Floyd Bartlett
DOGM REPRESENTATIVE

11/29/2005 1:00 PM DATE/TIME

Evaluation Ranking Criteria and Ranking Score For Reserve and Onsite Pit Liner Requirements

Site-Specific Factors	Ranking	Site Ranking
Distance to Groundwater (feet)		
>200	0	
100 to 200 75 to 100	5 10	
25 to 75	15	<u>0</u>
<25 or recharge area	20	-
Distance to Surf. Water (feet) >1000	0	
300 to 1000	2	
200 to 300	10	
100 to 200 < 100	15 20	ģ
	20	_2
Distance to Nearest Municipal Well (feet)		
>5280	0	
1320 to 5280	5	
500 to 1320 <500	10 20	•
2300	20 .	0
Distance to Other Wells (feet)		
>1320	0	
300 to 1320 <300	10	
<300	20	0
Native Soil Type		
Low permeability	0	
Mod. permeability High permeability	10	
High permeability	20	<u>20</u>
Fluid Type		
Air/mist	0	•
Fresh Water TDS >5000 and <10000	5	
TDS >10000 and <10000 TDS >10000 or Oil Base Mud Fluid	10 15	
containing significant levels of	±3	
hazardous constituents	20	<u>. 5</u>
Drill Cuttings		
Drill Cuttings Normal Rock	0	
Salt or detrimental	10	0
American Description (description)		
Annual Precipitation (inches) <10	0	
10 to 20	5	
>20	10	<u> </u>
Affected Populations		
<10	0	
10 to 30	6	
30 to 50	8	
>50	10	0
Presence of Nearby Utility		
Conduits		
Not Present	0	
Unknown Present	10 15	^
	1.0	0

Final Score 27 (Level I Sensitivity)

Sensitivity Level I = 20 or more; total containment is required.
Sensitivity Level II = 15-19; lining is discretionary.
Sensitivity Level III = below 15; no specific lining is required.





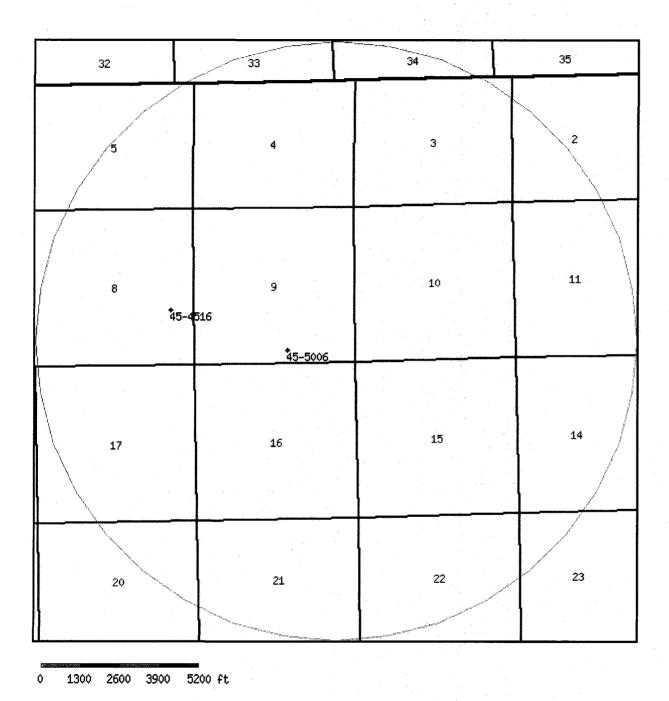


WRPLAT Program Output Listing

Version: 2004.12.30.00

Rundate: 12/06/2005 10:38 AM

Radius search of 10000 feet from a point N704 W649 from the SE corner, section 09, Township 6S, Range 22E, SL b&m Criteria:wrtypes=W,C,E podtypes=U status=U,A,P usetypes=all



Water Rights

WR Number	Diversion Type/Location	Well Log	Status	Priority U	Jses	CFS ACFT	Owner Name
45-4516	Underground	well info	P	19800422 D	OIS (0.015 0.000	TODD R., SUSAN F., RICKY T. & CHRISTINA M. THACKER
	S775 W775 E4 08 6S 22E SL						P.O. BOX 876
<u>45-5006</u>	Underground		U	19820416 O) (0.030 0.000	R. G. WILEY
	N450 E400 S4 09 6S 22E SL						P.O. BOX #202

Natural Resources | Contact | Disclaimer | Privacy Policy | Accessibility Policy

STATE ACTIONS

Resource Development Coordinating Committee

Governor's Office of Planning and Budget

5110 State Office Building **SLC, UT 84114**

Phone No. 537-9230

1. State Agency

Oil, Gas and Mining 1594 West North Temple, Suite 1210 Salt Lake City, UT 84114-5801

2. Approximate date project will start:

Upon Approval or December 2, 2005

3. Title of proposed action:

Application for Permit to Drill

4. Description of Project:

The Houston Exploration Company proposes to drill the North Horseshoe 16-9-6-22 well (wildcat) on a State lease ML-47969, Uintah County, Utah. This action is being presented to the RDCC for consideration of resource issues affecting state interests. The Division of Oil, Gas and Mining is the primary administrative agency in this action and must issue approval before operations commence.

5. Location and detailed map of land affected (site location map required, electronic GIS map preferred)

(include UTM coordinates where possible) (indicate county)

704' FSL 649' FEL, SE/4 SE/4,

Section 9, Township 6 South, Range 22 East, Uintah County, Utah

6. Possible significant impacts likely to occur:

Surface impacts include up to five acres of surface disturbance during the drilling and completion phase (estimated for five weeks duration). If oil and gas in commercial quantities is discovered, the location will be reclaimed back to a net disturbance of between one and two acres – not including road, pipeline, or utility infrastructure. If no oil or gas is discovered, the location will be completely reclaimed.

- 7. Identify local government affected
 - a. Has the government been contacted?
 - b. When?
 - c. What was the response?
 - d. If no response, how is the local government(s) likely to be impacted?
- 8. For acquisitions of land or interests in land by DWR or State Parks please identify state representative and state senator for the project area. Name and phone number of state representative, state senator near project site, if applicable:
 - Has the representative and senator been contacted?
- 9. Areawide clearinghouse(s) receiving state action: (to be sent out by agency in block 1) Uintah Basin Association of Governments

LU.	. For	turther	information,	contact:
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11. Signature and title of authorized officer

Diana Whitney

(801) 538-5312 Phone:

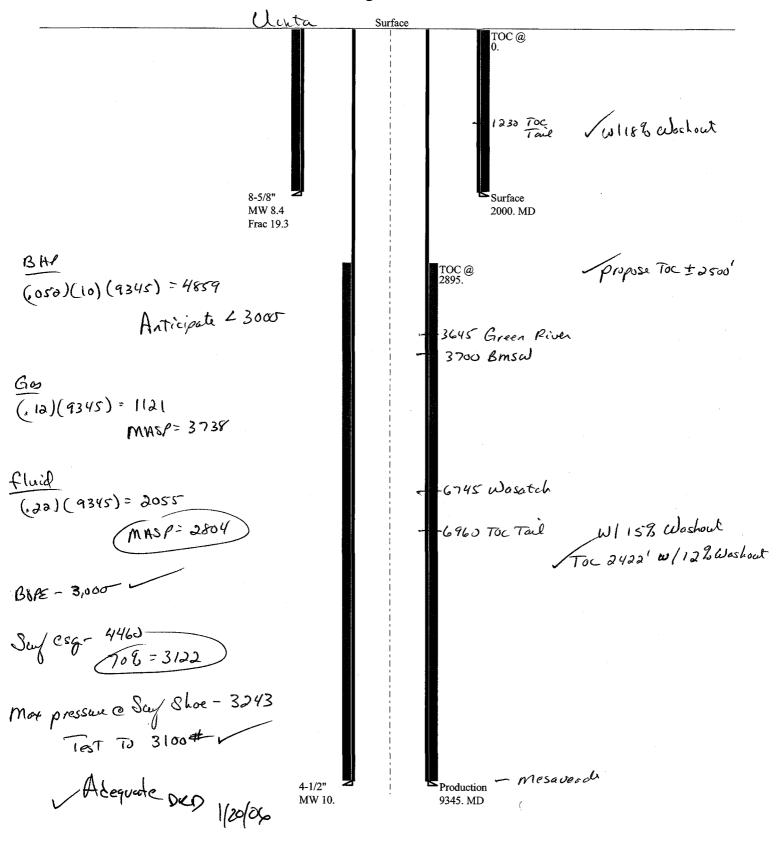
Gil Hunt, Associate Director

November 18, 2005 Date:

Silth

1-06 Houston N Horseshoe 1-0-6-22

Casing Schematic



Well name:

01-06 Houston N Horseshoe 16-9-6-22

Operator:

Houston Exploration Company

String type:

Surface

Project ID:

43-047-37393

Re subsequent strings: Next setting depth:

9,345 ft

Location:

Uintah County

Design parameters: Collapse		Minimum design f	factors:	Environment: H2S considered?	No
Mud weight: Design is based on evacua	8.400 ppg ated pipe.	Design factor	1.125	Surface temperature: Bottom hole temperature: Temperature gradient:	No 65 °F 93 °F 1.40 °F/100ft
		Durati		Minimum section length:	250 ft
Down		<u>Burst:</u> Design factor	1.00	Cement top:	0 ft
Burst Max anticipated surface					
pressure:	1,760 psi				
	0.120 psi/ft	<u>Tension:</u>		Non-directional string.	
Calculated BHP	2,000 psi	8 Round STC:	1.80 (J)		
		8 Round LTC:	1.80 (J)		
No backup mud specified.		Buttress:	1.60 (J)		
		Premium:	1.50 (J)		
	2,000 psi	8 Round LTC: Buttress:	1.80 (J) 1.60 (J)		

Body yield:

Nominal		End	True Vert	Measured	Drift	Internal
	Tension is base Neutral point:	d on bu	uoyed weight. 1,749 ft	Next mud Next setti Fracture o Fracture o Injection p	ng BHP: mud wt: depth:	10.000 ppg 4,855 psi 19.250 ppg 2,000 ft 2,000 psi

1.50 (B)

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	2000	8.625	36.00	J-55	ST&C	2000	2000	7.7	143.5
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	873	3450	3.953	2000	4460	2.23	63	434	6.89 J

Prepared

Clinton Dworshak

Utah Div. of Oil & Mining

Phone: 801-538-5280 FAX: 810-359-3940

Date: January 19,2006 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 2000 ft, a mud weight of 8.4 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.



01-06 Houston N Horseshoe 16-9-6-22

Operator:

Houston Exploration Company

String type:

Production

Project ID:

43-047-37393

Location:

Uintah County

D	esign	parameters:

Collapse

Mud weight:

Design is based on evacuated pipe.

10.000 ppg

Minimum design factors:

Collapse: Design factor

1.125

Environment:

H2S considered?

No 65 °F

Surface temperature: 196 °F Bottom hole temperature:

Temperature gradient: 1.40 °F/100ft

Minimum section length: 1,500 ft

Burst:

Design factor

1.00

Cement top:

2.895 ft

Burst

Max anticipated surface

pressure: Internal gradient: Calculated BHP

3,733 psi 0.120 psi/ft 4,855 psi

No backup mud specified.

Tension:

8 Round STC: 8 Round LTC:

> Buttress: Premium:

Body yield:

1.80 (J) 1.80 (J) 1.60 (J)

1.50 (J) 1.50 (B)

Tension is based on buoyed weight. Neutral point: 7,948 ft

Non-directional string.

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (Ibs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	9345	4.5	11.60	N-80	LT&C	9345	9345	3.875	216.6
Run Seq	Collapse Load (psi) 4855	Collapse Strength (psi) 6350	Collapse Design Factor 1.308	Burst Load (psi) 4855	Burst Strength (psi) 7780	Burst Design Factor 1.60	Tension Load (Kips) 92	Tension Strength (Kips) 223	Tension Design Factor 2.42 J

Prepared

Clinton Dworshak

Utah Div. of Oil & Mining

Phone: 801-538-5280

FAX: 810-359-3940

Date: January 19,2006 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 9345 ft, a mud weight of 10 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

From:

Robert Clark Whitney, Diana

To: Date:

11/28/2005 9:17:07 AM

Subject:

RDCC short turn around responses

The following comments are being submitted directly to DOG&M due to their short turn around status.

The following comments are submitted for RDCC #5944-5949. The comments pertain to all projects. Comments begin: The proposed *North Horseshoe 12-7-6-22, 16-9-6-22, 14-10-6-22, 2-15-6-22, 4-15-6-22, and 3-16-6-21* well drilling projects in Uintah County may require a permit, known as an Approval Order, from the Utah Division of Air Quality if any compressor stations are constructed at the site. A permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, SLC, UT, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The proposed project is also subject to Utah Air Quality Rule R307-205-3, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Division of Air Quality, but steps need to be taken to minimize fugitive dust, such as, watering and/or chemical stabilization, providing vegetative or synthetic cover and windbreaks. A copy of the rules may be found at www.rules.utah.gov/publicat/code/r307/r307.htm . Comments end.

The following comments are submitted for RDCC #5950-5952. The comments pertain to all projects. Comments begin: The proposed *Thurston 5-15-9-24, 13-29-9-24, and 10-15-9-24* well drilling projects in Uintah County may require a permit, known as an Approval Order, from the Utah Division of Air Quality if any compressor stations are constructed at the site. A permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, SLC, UT, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The proposed project is also subject to Utah Air Quality Rule R307-205-3, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Division of Air Quality, but steps need to be taken to minimize fugitive dust, such as, watering and/or chemical stabilization, providing vegetative or synthetic cover and windbreaks. A copy of the rules may be found at www.rules.utah.gov/publicat/code/r307/r307.htm . Comments end.

Robert Clark

Division of Air Quality 536-4435

CC:

Mcneill, Dave; Wright, Carolyn

From:

Ed Bonner

To:

Whitney, Diana

Date:

12/20/2005 9:54:05 AM

Subject:

Well Clearance

The following wells have been given cultural resource clearance by the Trust Lands Cultural Resources Group:

Enduring Resources, LLC

Big Pack 12-21-11-2

Big Pack 12-21-13-2

Big Pack 12-21-24-2

EOG Resources, Inc

Chapita Wells Unit 695-32

The Houston Exploration Company

North Walker Hollow 2-32-6-23

North Walker Hollow 8-32-6-23

North Walker Hollow 10-32-6-23

North Walker Hollow 12-32-6-23

North Walker Hollow 16-32-6-23

North Horseshoe 12-7-6-22

North Horseshoe 16-9-6-22

North Horseshoe 14-10-6-22

North Horseshoe 2-15-6-22

North Horseshoe 4-15-6-22

Westport Oil & Gas Company

NBU 1022-20N

NBU 1022-20L

NBU 1022-20F

NBU 1022-20D

If you have any questions regarding this matter please give me a call.

CC:

Garrison, LaVonne; Hill, Brad; Hunt, Gil

Clinton Dworshak - cement sks changes

From:

eric bowedn <starman686@yahoo.com>

To:

<clintondworshak@utah.gov>

Date:

1/18/2006 1:39 PM

Subject: cement sks changes

here are the cement sks changes that you reqested.

Yahoo! Photos - Showcase holiday pictures in hardcover

Photo Books. You design it and we'll bind it!

THE HOUSTON EXPLORATION COMPANY

WELL NAME	API	LEAD	TAIL
		sks	sks
NH 9-16-6-21	43-047-37439	415	514
NH 3-16-6-21	43-047-37391	415	514
NH 13-16-6-21	43-047-37575	415	514
NH 15-2-6-21	43-047-37477	415	514
NH 13-2-6-21	43-047-37476	415	514
NH 11-16-6-21	43-047-37441	499	515
NH 7-16-6-21	43-047-37438	499	515
NH 1-16-6-21	43-047-37442	499	515
NH 15-16-6-21	43-047-37440	499	515
NH 12-7-6-22	43-047-37392	415	515
NH 16-9-6-22	43-047-37392	415	515
NH 14-10-6-22	43-047-37394	415	515
NH 4-15-6-22	43-047-37394	415	515
NH 2-15-6-22	43-047-37395	415	515 515
1111 2-15-0-22	43-047-37393	413	313
NWH 13-36-6-23	43-047-37463	357	526
NWH 15-36-6-23	43-047-37464	357	526
NWH 11-36-6-23	43-047-37462	357	526
NWH 14-32-6-23	43-047-37478	357	526
NWH 2-32-6-23	43-047-37399	357	526
NWH 8-32-6-23	43-047-37401	357	526
NWH 10-32-6-23	43-047-37400	357	526
NWH 12-32-6-23	43-047-37397	357	526
NWH 16-32-6-23	43-047-37398	357	526
G 2-2-6-19	43-047-37561	153	1,050
G 16-2-6-19	43-047-37562	153	1,050
G 1-2-6-19	43-047-37563	153	1,050
G 3-2-6-19	43-047-37568	153	1.050



State of Utah

Department of Natural Resources

> MICHAEL R. STYLER Executive Director

Division of Oil, Gas & Mining

JOHN R. BAZA Division Director JON M. HUNTSMAN, JR. Governor

GARY R. HERBERT Lieutenant Governor

January 23, 2006

Houston Exploration Company 1100 Louisiana, Suite 2000 Houston, TX 77002

Re:

North Horseshoe 16-9-6-22 Well, 704' FSL, 649' FEL, SE SE, Sec. 9,

T. 6 South, R. 22 East, Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann.§ 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-37393.

Sincerely,

Gil Hunt

Associate Director

All That

pab Enclosures

cc:

Uintah County Assessor

SITLA

Operator:	Houston Exploration Company	
Well Name & Number	North Horseshoe 16-9-6-22	
API Number:	43-047-37393	
Lease:	ML-47969	

Location: SE SE

Sec. 9

T. 6 South

R. 22 East

Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for Permit to Drill.

2. Notification Requirements

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- 24 hours prior to cementing or testing casing
- 24 hours prior to testing blowout prevention equipment
- 24 hours prior to spudding the well
- within 24 hours of any emergency changes made to the approved drilling program
- prior to commencing operations to plug and abandon the well

The following are Division of Oil, Gas and Mining contacts and their work telephone numbers (please leave a voice mail message if the person is not available to take the call):

- Dan Jarvis at (801) 538-5338
- Carol Daniels at (801) 538-5284 (spud)

3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

- 4. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.
- 5. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)

Page 2 43-047-37393 January 23, 2006

- 6. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.
- 7. Operator shall comply with applicable recommendations resulting from Resource Development Coordinating Committee review. Statements attached.



State of Utah

Department of Natural Resources

MICHAEL R. STYLER Executive Director

Division of Oil, Gas & Mining

JOHN R. BAZA Division Director



GARY R. HERBERT Lieutenant Governor

February 26, 2007

Ginger Stringham
The Houston Exploration Co.
1100 Louisiana, Suite 2000
Houston, TX 77002-6800

Re:

APD Rescinded -North Horseshoe 16-9-6-22 Sec. 9 T. 6 R. 22E

Uintah County, Utah API No. 43-047-37393

Ms. Stringham:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on January 23, 2006. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective February 26, 2007.

A new APD must be filed with this office for approval <u>prior</u> to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Diana Mason

Environmental Scientist

cc: Well File

SITLA, Ed Bonner

Division of Oil, Gas and Mining

OPERATOR CHANGE WORKSHEET

ROUTING 1. DJJ 2. CDW

Change of Operator (Well Sold)	old) X - Operator Merger							
The operator of the well(s) listed below has chan	ged, e	ffectiv	/e:			6/1/2007		
FROM: (Old Operator): N2525 - The Houston Exploration Company 1100 Louisiana, Suite 2000 Houston, TX 77002				TO: (New Operator): N6965-Forest Oil Corporation 707 17th St, Suite 3600 Denver, CO 80202				
Phone: 1-(713) 830-6800				Phone: 1 (303)	812-1755			
CA No.				Unit:				
WELL NAME	SEC	TWN	RNG	API NO	ENTITY	LEASE	WELL	WELL
The state of the s					NO	TYPE	TYPE	STATUS
SEE ATTACHED LIST							L	
OPERATOR CHANGES DOCUMENT Enter date after each listed item is completed 1. (R649-8-10) Sundry or legal documentation was 2. (R649-8-10) Sundry or legal documentation was 3. The new company was checked on the Depart	as rece	eived f	from the	NEW operator	on:	7/30/2007 7/30/2007 s Database of	- -	7/31/2007
4a. Is the new operator registered in the State of U				Business Numb		571171-0143		
4b. If NO, the operator was contacted contacted of							-	
5a. (R649-9-2)Waste Management Plan has been re		d on:		IN PLACE				
5b. Inspections of LA PA state/fee well sites comp					-			
5c. Reports current for Production/Disposition & S				YES	-			
6. Federal and Indian Lease Wells: The BI				as approved the	- e merger, na	ame change.		
or operator change for all wells listed on Feder					BLM	not yet	BIA	
7. Federal and Indian Units:	ui oi i							-
The BLM or BIA has approved the successor	r of w	nit ope	rator fo	r wells listed on	:	n/a		
8. Federal and Indian Communization Ag							-	
The BLM or BIA has approved the operator						n/a	_	
9. Underground Injection Control ("UIC"			The D	ivision has appr	oved UIC F	orm 5, Trans	fer of Au	thority to
Inject, for the enhanced/secondary recovery un		ject fo	or the wa	ater disposal we	ll(s) listed	on:	n/a	_
DATA ENTRY:								
1. Changes entered in the Oil and Gas Database	on:			7/31/2007	_			
2. Changes have been entered on the Monthly O				oread Sheet on:		7/31/2007		
3. Bond information entered in RBDMS on:				7/31/2007	-			
4. Fee/State wells attached to bond in RBDMS of				7/31/2007 n/a	-			
5. Injection Projects to new operator in RBDMS6. Receipt of Acceptance of Drilling Procedures		DD/Ne	w on	IVa	- pending			
BOND VERIFICATION:	IOI AI	. D/140	w on.		ponome			
+ T + 1 11() 11 D - 13T1				6236351				
Federal well(s) covered by Bond Number: Indian well(s) covered by Bond Number:				n/a	-			
3a. (R649-3-1) The NEW operator of any fee we	ll(s) l	isted c	overed	by Bond Numbe	- er	6218963		
3b. The FORMER operator has requested a release					not yet		-	
TEACE INTERPORT AWARD MATTER	~ <u>a</u> ~	ION.						
LEASE INTEREST OWNER NOTIFIC 4. (R649-2-10) The FORMER operator of the fee	JAI.	hae h	een con	tacted and infor	med by a le	etter from the	Division	
of their responsibility to notify all interest own	ers of	this ch	nange of	nacica and infor	8/1/2007			
COMMENTS:	010 01	<u> </u>						

	STATE OF UTAH DEPARTMENT OF NATURAL RESOUR	RCES		FORM 9
	DIVISION OF OIL, GAS AND MI	NING		5. LEASE DESIGNATION AND SERIAL NUMBER: See Attached List
SUNDRY	Y NOTICES AND REPORTS	S ON WEL	.LS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for proposals to drill a	new wells, significantly deepen existing wells below cun laterals. Use APPLICATION FOR PERMIT TO DRILL fo	rent bottom-hole der	oth, reenter plugged wells, or to	7. UNIT or CA AGREEMENT NAME.
1. TYPE OF WELL OIL WELL		onn for such propos	als.	8. WELL NAME and NUMBER: See Attached List
2. NAME OF OPERATOR:	N/9/-			9. API NUMBER:
Forest Oil Corporation	N6965			various
3. ADDRESS OF OPERATOR: 707 17th Street, #3600	Py Denver, STATE CO ZIP	80202	(303) 812-1755	10. FIELD AND POOL, OR WILDCAT:
4. LOCATION OF WELL	The second secon	Common Manager and Transport	www.paga.com.com.com.com.com.com.com.com.com.com	NAC 1 NEW NACOUSTICS
FOOTAGES AT SURFACE: See a	ttached list			COUNTY:
QTR/QTR, SECTION, TOWNSHIP, RAN	NGE, MERIDIAN:			STATE: UTAH
11. CHECK APPI	ROPRIATE BOXES TO INDICAT	E NATURE	OF NOTICE, REPO	RT, OR OTHER DATA
TYPE OF SUBMISSION		Т	YPE OF ACTION	
NOTICE OF INTENT	ACIDIZE	DEEPEN		REPERFORATE CURRENT FORMATION
(Submit in Duplicate)	ALTER CASING	FRACTURE	TREAT	SIDETRACK TO REPAIR WELL
Approximate date work will start:	CASING REPAIR	NEW CONS	STRUCTION	TEMPORARILY ABANDON
	CHANGE TO PREVIOUS PLANS	OPERATOR	RICHANGE	TUBING REPAIR
	CHANGE TUBING	PLUG AND	ABANDON	VENT OR FLARE
✓ SUBSEQUENT REPORT (Submit Original Form Only)	CHANGE WELL NAME	PLUG BACI	<	WATER DISPOSAL
Date of work completion:	CHANGE WELL STATUS	PRODUCTI	ON (START/RESUME)	WATER SHUT-OFF
25.6 5. 110.11 55.11 \$1.01.	COMMINGLE PRODUCING FORMATIONS	RECLAMAT	TON OF WELL SITE	✓ other: Change of Operator
	CONVERT WELL TYPE	RECOMPLE	ETE - DIFFERENT FORMATION	
12. DESCRIBE PROPOSED OR CO	OMPLETED OPERATIONS. Clearly show all p	ertinent details in	cluding dates, depths, volume	es, etc. N2525
N-2525) to Forest Oil Corp	change the operator for the attac poration (N-6965). Forest merged he contract operated wells will con	d with The H	ouston Exploration C	Company, a copy of the merger
	new operator, accepts all applical ducted on the lease or portion of the			and restrictions concerning
Forest Oil Corporation me	ets the State of Utah bonding req	uirements u	nder Safeco bond #6	218963.
Please send all future con	respondence to Forest Oil Corpor	ration at the	above listed address	
Forest Oil Corporation, 70	07 17th Street, Suite #3600, Denve	er, CO 8020	2	
(1) / L			7 -	5-07
J. C. Ridens, Senior Vice	President - Western Region			Pate
	<u> </u>			

Ridens, Senior V NAME (PLEASE PRINT) ____ Joanne C. Hresko Vice President & General Mgr. - Northern Division

(This space for State use only)

No wells in APD status or at this time. RECEN

RECEIVED

JUL 3 U 2007

wmp

(5/2000)

SIGNATURE

11.

Division of Oil, Gas and Mining Earlene Russell, Engineering Technician

well name	sec	twp	rng	api	entity	lease	well	stat	flag	unit	qtr qtr	1 num	op no
FEDERAL 28-01	28			4304730098			GW				SESE	UTU-016257	
CONOCO STATE 32-2	32	080S	250E	4304730100	10096	State	GW	S			NENE	ML-11124	N2525
ROCK HOUSE 11-31	31	100S	230E	4304733312	13984	Federal	GW	P			NESW	UTU-76281	N2525
BONANZA 4B-12	12	090S	230E	4304733806	14593	Federal	D	PA			NWNW	UTU-74426	N2525
WALKER HOLLOW 13-31	31	060S	230E	4304735039		Federal	GW	LA			SESW	UTU-76280	N2525
ROCK HOUSE 6D-32	32	100S	230E	4304735409	14293	State	GW	S			SENW	ML-47063	N2525
BONANZA 2B-16	16	090S	240E	4304735694	14186	State	D	PA			NWNE	ML-46526	N2525
ROCK HOUSE 2D-36	36	100S	220E	4304735759	14357	State	GW	P			NWNE	ML-47061	N2525
ROCK HOUSE 2D-32	32	100S	230E	4304735760	14317	State	GW	S			NWNE	ML-47063	N2525
ROCK HOUSE 10D-32	32	100S	230E	4304735761	14318	State	GW	S			NWSE	ML-47063	N2525
ROCK HOUSE 12D-32	32	100S	230E	4304735762	14294	State	GW	P			NWSW	ML-47063	N2525
ROCK HOUSE 11-36	36	100S	220E	4304735900	14478	State	GW	P			NESW	ML-46907	N2525
ROCK HOUSE 4-36	36	100S	220E	4304735901	14449	State	GW	S			NWNW	ML42061	N2525
BONANZA 12A-22	22	090S	240E	4304735922	14520	Federal	D	PA			NWSW	UTU-78118	N2525
BONANZA 14-16	16	090S	240E	4304735941	14521	State	D	PA			SESW	ML-46526	N2525
ROCK HOUSE 11-2	02	110S	230E	4304736153	14695	State	GW	P	С		NESW	ML-47078	N2525
ROCK HOUSE 7-32-10-23	32	100S	230E	4304736306	14766	State	GW	S			SWNE	ML-47063	N2525
ROCK HOUSE 3-32-10-23	32	100S	230E	4304736307	14781	State	GW	P			NENW	ML-47063	N2525
ROCK HOUSE 5-32-10-23	32	100S	230E	4304736410	14727	State	GW	S			SWNW	ML-47063	N2525
GUSHER 6-2	02	060S	190E	4304736963		State	OW	LA			SENW	ML-49144	N2525
N HORSESHOE 3-16-6-21	16	060S	210E	4304737391	15716	State	GW	DRL	C		NENW	ML-49317	N2525
N HORSESHOE 12-7-6-22	07	060S	220E	4304737392		State	GW	LA			NWSW	ML-47969	N2525
N HORSESHOE 16-9-6-22	09	060S	220E	4304737393		State	GW	LA	T		SESE	ML-47969	N2525
N HORSESHOE 14-10-6-22	10	060S	220E	4304737394		State	GW	LA			SESW	ML-47969	N2525
N HORSESHOE 2-15-6-22	15	060S	220E	4304737395		State	GW	LA			NWNE	ML-47969	N2525
N HORSESHOE 4-15-6-22	15	060S	220E	4304737396		State	GW	LA			NWNW	ML-47969	N2525
N WALKER HOLLOW 12-32-6-23	32	060S	230E	4304737397		State	GW	LA	 		NWSW	ML-47777	N2525
N WALKER HOLLOW 16-32-6-23	32	060S	230E	4304737398		State	GW	LA	1		SESE	ML-47777	N2525
N WALKER HOLLOW 2-32-6-23	32	060S	230E	4304737399	15741	State	GW	DRL	С		NWNE	ML-47777	N2525
N WALKER HOLLOW 10-32-6-23	32	060S	230E	4304737400		State	GW	LA			NWSE	ML-47777	N2525
N WALKER HOLLOW 8-32-6-23	32	060S	230E	4304737401		State	GW	LA			SENE	ML-47777	N2525
N WALKER HOLLOW 11-36-6-23	36	060S	230E	4304737462		State	GW	LA			NESW	ML-47970	N2525
N WALKER HOLLOW 13-36-6-23	36	060S		4304737463		State	GW	LA			swsw	ML-47970	N2525
N WALKER HOLLOW 15-36-6-23	36	060S	230E	4304737464		State	GW	LA			SWSE	ML-47970	N2525
N WALKER HOLLOW 14-32-6-23	32	·		4304737478		State	GW	LA			SESW	ML-47777	N2525
HACKING RES 11-32-8-25				4304737479		State	GW				NESW	ML-11124	N2525
HACKING RES 3-32-8-25				4304737480		State	GW				NENW	ML-11124	N2525
HACKING RES 5-32-8-25			·	4304737481		State	GW				SWNW	ML-11124	N2525
HACKING RES 15-32-8-25	32			4304737482	1	State	GW	+		1	SWSE	ML-11124	N2525
HACKING RES 9-32-8-25	32			4304737483		State	GW	+			NESE	ML-11124	N2525
HACKING RESERVOIR 7-32-8-25	32	080S	250E	4304737571	15885	State		DRL	C	1	SWNE	ML-11124	N2525